same. Each of the voltages is selectively applied to the load **12** by N switches including the first switch **14** and N-1 additional switches. Between charge cycles, switch **0** is closed. To charge the load, switch **0** is opened and the supplies V_1 through V_N are connected to the load in succession by selectively closing the switches, that is, by momentarily closing switch **1**, opening switch **1**, momentarily closing switch **2** etc. To discharge the load, the supplies V_{N-1} through V_1 are switched in in reverse order. Then switch **0** is closed connecting the output to ground.

In Column 4, please amend paragraph 5 as follows:

On the trailing edge of input pulse, a discharge cycle is initiated when the switches are momentarily closed in reverse order. Thus, switch N is opened and switch N–1 is closed. Then switch N–1 is opened and switch N–2 is closed and etc. On the closure of switch N–1, the associated tank capacitor will receive most of the charge on the load capacitance. Each capacitor down the line will receive a lower charge than the immediately preceding capacitor. After switch **1** opens, switch **0** closes to complete the cycle dumping the remaining charge on the load C_L to ground. Thus, over several cycles the tank capacitors will approach their steady state voltages, for example; the (N-1) th through 1st tank capacitors may have charges of say 5, 4, 3, 2 and 1 volts respectively. Then, at the beginning of the next cycle, on the closure of the first switch, the voltage on the first tank capacitor is applied to the load, then the voltage on the second capacitor is applied to the load and so on. Thus, in the example, first 1 volt is applied to the load, then 2 volts, then three volts and etc. As a result, the voltage on the load will gradually increase as shown in FIG. 5(*j*).

In Column 5, please amend paragraph 3 as follows:

Even if the tank capacitor voltages differ from the "correct" values, the circuit will work logically correctly, since each charging (discharging) cycle ends by connecting the load to the supply rail (ground). Voltage deviations simply bring higher dissipation. This happens during start-up, before the tank voltages have had time to converge to the even distribution between the supply voltage and ground.

In Column 6, please amend paragraph 7 as follows:

It remains to select the value for m. If it is chosen too small, there will still be a significant voltage across a switch when the next switch is to close. Hence, there is an increase in the average voltage across each switch ~~and~~ therefore a dissipation increase (the first term in equation [10] is changed slightly). If on the other hand, m is chosen unnecessarily large, time is wasted that could have been used to increase the number of steps. Thus, in general, optimization methods for the value of m vary according to the application. However, one skilled in the art will be able to select a suitable value for m using conventional teachings (e.g., a simulation program).

In Column 1, please amend paragraph 1 as follows:

NC

This application and co-pending application, Serial No. 09/758,631, filed January 10, 2001, are each applications for reissue of U.S. Patent No. 5,473,526 [U.S. Application Serial No. 08/231,637, filed April 22, 1994]. The present invention relates to electronic circuits and systems. More specifically, the present invention relates to power dissipation in electronic circuits and systems.

At Column 1, line 5, please add the following new paragraph:

This invention was made with government support under DABT-63-92-C-0052 awarded by ARPA. The government has certain rights in the invention.